

WILDERGRAM

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ABSTRACT

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Abstract: Wilderness managers need an inexpensive yet fairly reliable system to measure visitor use and solicit comments in wilderness areas. Various voluntary registration and self-permitting systems have been tried, studied and compared. The voluntary registration system has recently fallen into disfavor by the research community for being less reliable than the self-permitting systems. The general speculation is that the design components of the registration stations and the forms used may be responsible for the poor compliance rates.

This paper summarizes the research findings, offers a possible explanation for the problem and proposes a simple but unique change in design and wording for voluntary registration stations in the Big Slough Wilderness Area on the Davy Crockett National Forest in Texas.

TABLE OF CONTENTS

I.	EXECUTIVE SUMMARY	4
II.	INTRODUCTION	
	A. The Big Slough Wilderness Area	5
	B. The Problem	6
III.	LITERATURE REVIEW	7
IV.	METHODOLOGY	
	A. Research	8
	B. Analysis	8
V.	DISCUSSION	
	A. An Ad Agency Answer - Marketing	9
	B. Wildergram Station	10
	C. Wildergram Form	12
VI.	SUMMARY	
	A. A Local Wildergram Data Base	16
	B. Need to Evaluate the Wildergram	16
	C. Finally	17
VII.	LITERATURE CITED	18
VIII.	APPENDIX	19
	A. Map - Big Slough Wilderness Area	
	B. Map - National Forests and Grasslands in Texas	
	C. Brochure - Big Slough Canoe Trail	
	D. Brochure - Four C National Recreation Trail	
	E. Form - Visitor Registration Card (FS-2300-32)	

EXECUTIVE SUMMARY

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Summary: The objective of this project is to design a voluntary registration system which can be used to determine visitor characteristics, concerns and use data.

Research revealed that voluntary registration systems were considered less reliable than required self-permitting systems and that poor voluntary compliance might be due to the physical design of the registration stations. Presented here are some ideas which stem from psychological and marketing design methods which should correct these problems. A new direction gaining recognition as part of the Recreation Initiative is the use of marketing principles to do a better job of responding to the needs of our public. Since it is their needs and expectations that the Forest Service should be responsive to, more so than the Agency's, it makes sense to communicate information to them and solicit information from them in a manner they are used to. The proposal is to draw users to a voluntary registration station by the use of a bright, eye catching color and an intriguing word. Thus, the title for this project: "Wildergram". Hopefully this word will entice the curious visitor to the registration station where he will take a moment of his time to answer a few questions on a simple, easy to understand form.

INTRODUCTION

The Big Slough Wilderness Area

The Big Slough Wilderness (Appendix A) is located six miles north of Ratcliff, Texas on the Neches Ranger District of the Davy Crockett National Forest (Appendix B) in the Southern Region. This wilderness was selected at the suggestion of the Forest Recreation Staff Officer and for its proximity to the Supervisor's Office. It is fairly typical of the four areas designated wilderness in Texas by Congress in the Act of 1984 in that it is small relative to most other wilderness areas in the nation (3584 acres), it has multiple access points, and has a number of adjoining and included private lands.

The Big Slough is unique among the other Texas wilderness areas in that it is a bottom land environment with associated hardwood vegetation which floods often. It is situated in the Neches River bottom and includes the Big Slough Canoe Trail (Appendix C). Scurlock Camp, which is the put-in point for the canoe trail and a popular primitive hunting and fishing camp, is located in the northern part of the wilderness. The Four C National Recreation Trail (Appendix D), which originates to the south in the Ratcliff Lake Recreation Area, passes through the southern portion of the wilderness on its way to the Neches Bluff Overlook.

Although there are numerous possible entry routes, the routes used almost exclusively are the ones associated with the use of the Scurlock Camp site, the Four C National Recreation Trail, and canoe access along the east boundary of the Wilderness which is the Neches River.

The Problem

The greatest concern expressed by managers who are charged with managing wilderness areas is that they want a reliable system of determining use (Washburne, 1981) and getting feedback from users. A system is desired which will not be too expensive to operate under the present and future austere budgets. The costs involved with permits issued by agency or other personnel and the fact that electronic or mechanical counters can only give numbers and not qualitative information, leads one to research the viability of a self-registration system.

There have been a number of efforts since 1961 which have been aimed at designing and evaluating systems to measure use in wilderness areas. Legislative and agency requirements dictate that annual wilderness use reports be transmitted to high levels of the organization. However, the local manager wants use data and feedback available to him at his immediate level and time so that he can respond quickly to changes in demand on the wilderness resource, have the information he needs to make budget requests and have the basic "market research" type information so that he can make informed management decisions.

LITERATURE REVIEW

Background and policy direction come from the 2320 section of the Forest Service Manual, the Wilderness Management Handbook, FSH 2309.19, and the Final Environmental Impact Statement - Land and Resource Management Plan for the National Forests & Grasslands - Texas, 5/20/87. Publications and papers dealing with use measurement research in wilderness areas were gathered using the literature search services of Southfornet. This service supplied a list of over thirty papers dealing specifically with self registration systems in wilderness areas. A larger list supplied as part of the wilderness section of the Clemson Recreation Short Course was also helpful. Notes and discussions from certain sections of the Clemson Short Course were instrumental in the development of this project. Guidance and direction came particularly from the sections presented by Ed Bloedel on wilderness, John Shilling on WO perspectives, Rich Schreyer on sociology and psychology and John Syme on marketing.

METHODOLOGY

Research

The first use measurement systems evaluated were voluntary registration systems. The study of two early voluntary registrations systems by Wenger and Gregersen in 1961 and 1962 and another on the San Geronio Wilderness in California (James & Schreuder, 1971) seemed to present evidence that the voluntary registration systems could produce

reliable use estimates. Subsequent work (Lucas, 1975) by some of the same investigators questioned the accuracy of these early successes with the voluntary registration systems. Later studies in the Boundary Waters Canoe Area (Lime & Lorence, 1974) and the Spanish Peaks Primitive Area in Montana (Lucas & Kovalicky, 1981) evaluated required, self-permitting systems. These studies indicated that a required, self-permitting system was capturing a higher and more consistent percentage of compliance when compared to voluntary registration systems. One suggestion (Lime & Lorence, 1974) is that the lessons learned by violators who were cited for not filling out a permit, as well as an effort expended at advertising the permit requirement, were the chief reasons that the mandatory self-permitting system out-performed the voluntary registration system.

Analysis

Based on the previous discussion, it seems simple to say managers should institute the permit system in order to gather their desired use information. However, the permit system is a "demand" for information and implies a grant of permission, whereas the registration system is a "request" for information. A reasonable value to associate with wilderness is that it should be an unregulated experience. In fact, Forest Service manual policy recognizes this and specifies the instances where permit systems are justified. Also, with institution of a mandatory permit system goes the responsibility to enforce that regulation. This is a cost which managers find hard to fund even in developed recreation areas.

Lucas (1975) suggested that the design of a registration or permit station may have a lot to do with the rate of compliance. The Forest Service standard color scheme of brown and yellow is "designed" to be unobtrusive. Some people may not see it or may notice the station, recognize the standard F.S. colors and discount it as another regulation board. Lucas suggested the use of eye catching color in the stations and, in fact, his permit boxes were a "conspicuous bright blue" in his 1978 study in the Spanish Peaks Primitive Area.

DISCUSSION

An Ad Agency Answer - Marketing

A registration station was designed which will "lure" or attract users to approach the station in order to read a plea for information. The intention is to make use of a bright, eye catching orange or blue and an intriguing word to accomplish this. The word, of course, is "Wildergram". The aim is to offer the old "comments" or "suggestion box" fixture in a flashier package. The immediate reaction to this idea by a good many in this organization will probably be one of distaste. Add to this that it is proposed to do it in a wilderness area and expressions of more than mere distaste are sure to follow. But the Agency must stop expecting the public to act and feel the way it does about these things. Up until recently the Forest Service has been acting like a "seller", trying to satisfy its needs and expectations. "Marketing" is reacting to the needs and expectations of the public or consumer. If the Wildergram station is accepted by the

public and works in a wilderness, it could become the standard data collection station at all unmanned recreation facilities, either self-registration or self-permitting. A little "marketing" in the design will increase the percentage of users who will fill out a registration or permit.

This will be a departure from the Agency's current direction for the design of signs and stations, but it will be more of a shock to the Agency than our users. Our society has been indoctrinated to respond to color, flashy slogans, phrases and jingles.

Wildergram Station

The construction of the Wildergram registration stations will be similar to the standard used elsewhere. The exceptions will be that rather than the words "One Person From Each Party REGISTER HERE When Entering This Area" in plain, brown, block letters at the top, the word "WILDERGRAM" will appear in a neat, freehand style, in bright blue or orange. The registration box will also be painted a matching bright color. Figure 1 shows the standard sign and box as well as the Wildergram sign and box. The station will have protected storage for blank registration cards and a number of pencils.

The Wildergram station will be installed up the trail from the parking area or trail head, but barely within the wilderness area. This has been found to be a better location for compliance in a self-permit or registration system (Lucas & Kovalicky, 1981). The first Wildergram stations will be placed at the three major access points along the county and Forest Service roads bounding the area on

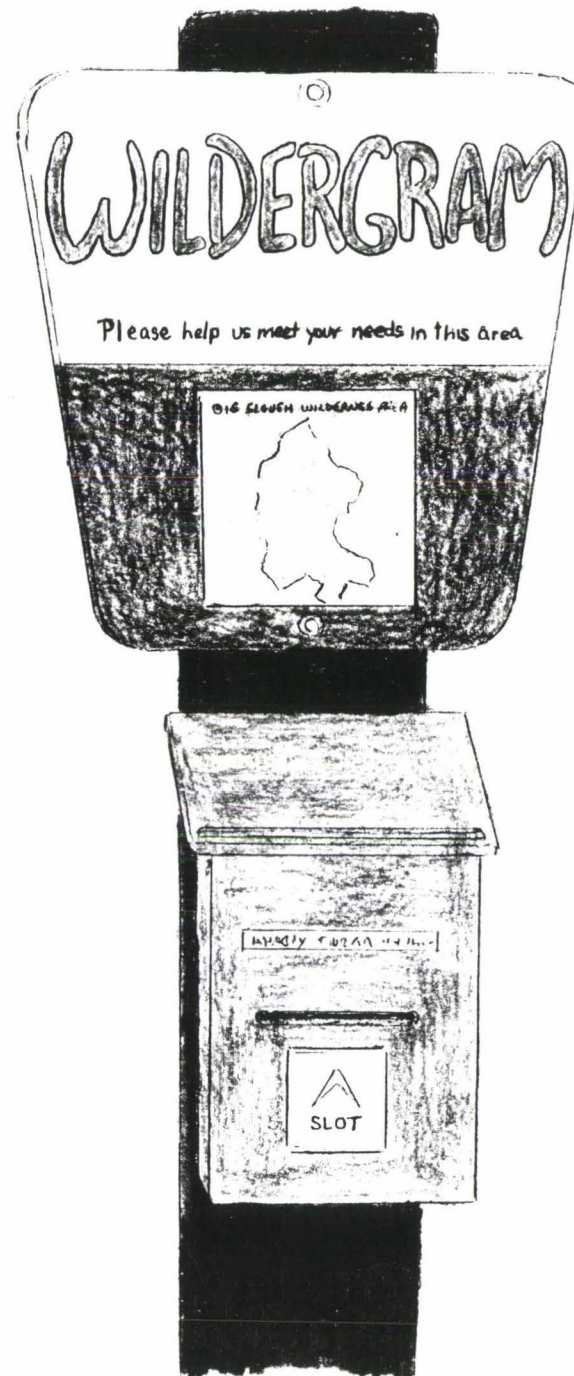
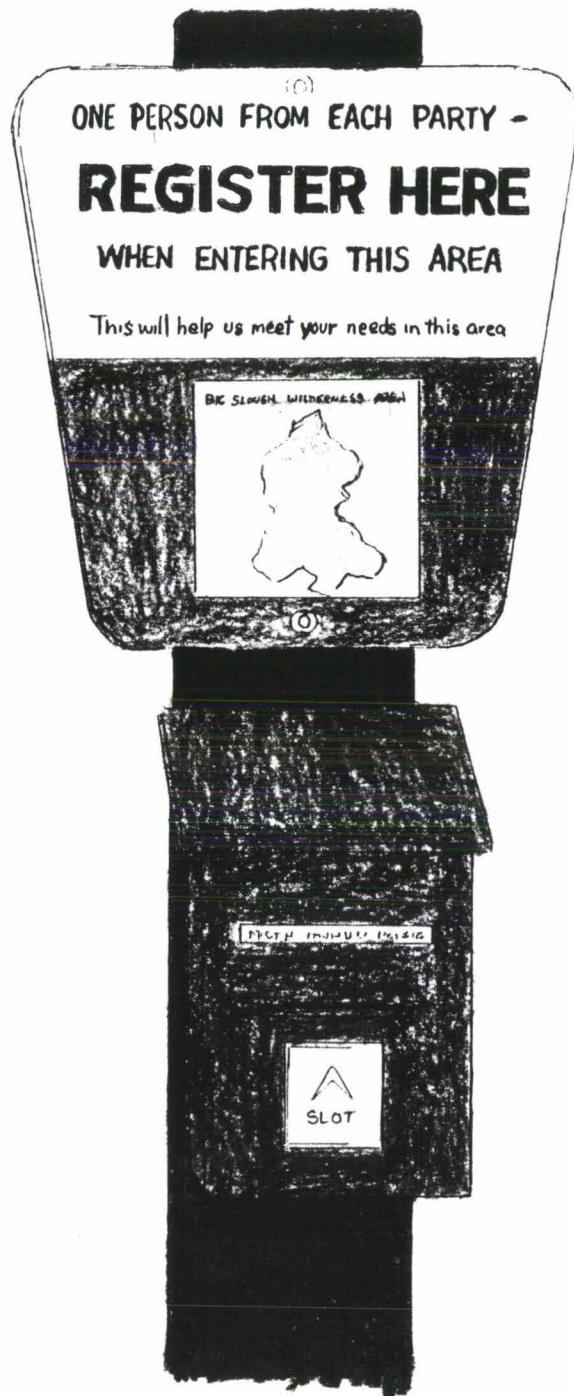



Figure 1

the west: 1) the Southern Parking Area; 2) the Four C Trail Foot Bridge; and 3) the entrance to Scurlock's Camp. (See Map Appendix A). Two additional stations may be located later: one at the point where Hickory Creek enters the Neches River on the east boundary and; one at the southern boundary where the Four C Trail enters the wilderness.

Wildergram Form

The currently approved "Visitor Registration Card" (FS-2300-32) has been used in wilderness areas throughout the F.S. system but has been less than popular with visitors. A local citizens advisory group in the Jefferson National Forest has expressed dissatisfaction with it and the form is no longer used. An informal notebook is now used there (Harry Fisher, Jefferson N.F., telecon 2-11-88). The problem these people had with the cards is evident (Figure 2 and Appendix E). The instructions are in fine print and difficult to read even in an office environment. They are much more difficult to read at the registration station with weather to contend with, maybe wearing a heavy pack and probably sweating a bit to top it off.

Beyond the fine print problem the form could be redesigned to aid the visitor in supplying the most important information first, at the top or beginning of the card, in a large format. As already mentioned, the title or lead-off of the card would be "WILDERGRAM". The appearance of the card would also be less governmental and the words "STOP" would be added after each data section, making the form look like a telegram.

U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE		FORM APPROVED OMB NO. 0595-0019 Expires 9/30/84																																																	
 <h2 style="margin: 0;">VISITOR REGISTRATION CARD</h2>		<p>(13) Travel Plan</p> <p>If a travel zone map is available, list all zones that you will be traveling through, in sequence, and indicate the number of nights you plan to spend in each zone.</p> <p>If travel zones are unknown, describe your planned trip by listing campsites, lakes or named landmarks you plan to visit and the number of nights you will spend in each area.</p>																																																	
<p>Completion of this form is voluntary and is not required by law or to obtain a Federal benefit. However, we would appreciate your cooperation in providing us with information about your planned National Forest visit. It will help us plan for future management and protection of this area.</p> <p>We will enter the proper codes in the shaded blocks.</p> <p style="text-align: right;">THANK YOU!</p>		<table border="1"> <tr> <th colspan="2">TRAVEL ZONE CODE</th> <th colspan="2">N I G H T S</th> </tr> <tr> <td></td><td></td><td></td><td></td> </tr> <tr> <td>32</td><td>33</td><td>34</td><td>35</td> </tr> <tr> <td>36</td><td>37</td><td>38</td><td>39</td> </tr> <tr> <td>40</td><td>41</td><td>42</td><td>43</td> </tr> <tr> <td>44</td><td>45</td><td>46</td><td>47</td> </tr> <tr> <td>48</td><td>49</td><td>50</td><td>51</td> </tr> <tr> <td>52</td><td>53</td><td>54</td><td>55</td> </tr> <tr> <td>56</td><td>57</td><td>58</td><td>59</td> </tr> <tr> <td>60</td><td>61</td><td>62</td><td>63</td> </tr> <tr> <td>64</td><td>65</td><td>66</td><td>67</td> </tr> <tr> <td>68</td><td>69</td><td>70</td><td>71</td> </tr> </table>		TRAVEL ZONE CODE		N I G H T S						32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
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(5) AREA VISITING (Write name of area)	6 7 8 9																																																		
(6) DATES OF VISIT (Give best estimate of start and finish dates of your visit)	10 11 12 13																																																		
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(7) LOCATION OF ENTRY POINT (Write name of entry point)	21 22 23																																																		
(8) LOCATION OF EXIT POINT (Write name of exit point)	24 25																																																		
(9) PRIMARY METHOD OF TRAVEL (Write method such as hiking, horseback, canoe, etc.)	26 27																																																		
(10) NUMBER OF PEOPLE IN GROUP	28 29																																																		
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☆ G.P.O. : 1982-360-939

FS-2300-32 (10/81)

Figure 2

The information a manager needs is demographic and statistical, such as city and state of residence (or Zip code), number in party, ages, length of stay, method of travel and date. The existing form asks for complete name and address first. This just isn't important data. Unless the visitor has a question or complaint that he wants an answer to, or he wants to supply this information for safety purposes, the Agency has no need of this information. Considering the philosophy of wilderness, the user may very well want anonymity and may be offended or put-off by being asked this information as a prerequisite to filling out the rest of the form where the data fields are.

The less important information desired could be located further down on the card with a statement preceding the section to the effect:

"The Forest Service appreciates the information you have supplied. Thank you. If you can spare the time, would you continue and fill out the remainder of the Wildergram below. We'd also like to hear any comments, suggestions or complaints you may have and you are welcome to use the back of this card for this purpose. When you are finished, please put the card in the slot provided."

The proposed design of the "WILDERGRAM" card appears in Figure 3.


U.S.D.A. FOREST SERVICE	<h1 style="margin: 0;">WILDERGRAM</h1>	VOLUNTARY REGISTRATION CARD								
AREA NAME: <input style="width: 150px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> STOP		DATE: <table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="font-size: 8px;">MONTH</td> <td style="font-size: 8px;">DAY</td> <td style="font-size: 8px;">YEAR</td> </tr> <tr> <td><input style="width: 20px;" type="text"/></td> <td><input style="width: 20px;" type="text"/></td> <td><input style="width: 20px;" type="text"/></td> </tr> </table> STOP	MONTH	DAY	YEAR	<input style="width: 20px;" type="text"/>	<input style="width: 20px;" type="text"/>	<input style="width: 20px;" type="text"/>		
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<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 60%;"> <p>Name: _____</p> <p>Mailing Address: _____</p> <p>City, State: _____</p> <p>Zip Code: _____</p> </div> <div style="width: 35%; text-align: center;">  </div> </div>										

Figure 3

SUMMARY

A Local Wildergram Data Base

A data base can be designed and maintained on the District and/or Forest in the Data General computer or on a Dasher micro-computer. Although the data base could be maintained on the District's DG it may require more memory than is available at that level. There is a wide variety of data base programs available for the desk top micro-computer, including the Data General Dasher, which could easily maintain and manipulate the Wildergram data. These data base programs range in cost from \$200 to \$1000.

Need to Evaluate the Wildergram

The purpose of this project is to design and install a number of Wildergram stations in one wilderness area to test a theory that a better design of the voluntary registration station and cards can increase the percentage of visitors who will use the system. The data taken from the Wildergrams will be used "as is" to estimate total use and it will be used as a source of subjective feedback for the District.

This is a beginning in the Forest's actions towards managing the new wilderness areas as prescribed by the Forest Land and Resource Management Plan. This system should be evaluated, in the way other self-registration systems have, in order to measure its effectiveness, accuracy and reliability. Either the Forest Service should contract this evaluation or enlist the aid of an outside organization to carry

out the evaluation. The Forest has already offered this project to Stephen F. Austin University in response to their request for projects their students might tackle as productive learning experiences. A similar arrangement was made with Texas A & M University a few years ago at Double Lake Recreation Area on the Sam Houston National Forest when new traffic counters were installed. The arrangement was handled under a Volunteer Agreement. The University was able to use the project as a teaching lab for its graduate students who carried out the survey and the Forest Service gained an evaluation of the best locations for placing the new counters as well as the formulas needed to calculate use figures from the counters.

Finally

In implementing this Wildergram approach, the Forest Service will prove it's ability to adapt to modern marketing techniques. We will therefor be managing the wilderness resource in a manner which best serves the users.

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APPENDIX

Inside Back Cover Jacket

- A. Map - Big Slough Wilderness Area
- B. Map - National Forests and Grasslands in Texas
- C. Brochure - Big Slough Canoe Trail
- D. Brochure - Four C National Recreation Trail
- E. Form - Visitor Registration Card (FS-2300-32)